

UNDESCRIBED CRANE-FLIES IN THE PARIS NATIONAL MUSEUM
(TIPULIDÆ, DIPTERA) : PART IV, ASIATIC SPECIES

(Continued),

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SUBFAMILY TIPULINÆ.

TRIBE TIPULINI.

GENUS *Pselliophora* Osten Sacken.

Pselliophora gloria nov. sp.

General coloration black; abdominal segments two and three reddish orange; wings with the basal three-fifths dark brown, the distal two-fifths conspicuously bright yellow; legs black, the posterior and middle tibiae with diffuse, yellowish, basal rings.

Female. — Length about 30 mm.; wing, 23.3 mm.

Rostrum and palpi black. Antennal scape black, the flagellum broken. Head deep velvety black.

Thorax entirely deep velvety black. Halteres dark brown, the knobs black. Legs with the coxae and trochanters velvety black; femora dark brownish black, the posterior femora deep black; tibiae dark brown, the tips darker; a broad (2.2 mm.) but ill-defined yellowish band on posterior tibiae near base; on mid-tibiae very narrow but evident; on anterior tibia represented only by a pale tinge on the inner side of tibia; tarsi black. Wings with the basal three-fifths dark brown, the apical two-fifths conspicuously and abruptly bright yellow, this including the base of cell 1st R_1 , the distal ends of cells R , M and Cu and all of the cells beyond the cord except the stigmal area in the end of cell 1st R_1 and the broad basal portion of cell R_2 , continued as a seam along vein R_3 , the deflection of R_{4+5} and $r-m$; faint brown clouds across cell 1st M_2 and in cells M and Cu_1 ; the brown area is uniformly dark except for pale

streaks near midlength of cells *R* and *M* and near the outer end of cell 1st *A*; seams along veins 2nd *A*, *Cu*₁, *Cu*₂ and the wing-axil even darker; veins similar in color to the areas traversed. Venation: Cell *M*₁ narrowly sessile; *m-cu* conspicuous.

Abdomen velvety black; segments two and three; except the narrow posterior margin of sternite three and a very narrow basal ring on tergite four deep reddish orange; ovipositor black, the valves acicular.

Habitat. — French Indo-China.

Holotype, ♀, Sébang-hien R. (Si-bang-hieng or Sé-bang-han), Cambodia, 1878 (Harmand); collector's number 1212.

Type in the collection of the Paris National Museum.

Pselliophora gloria is one of the largest and most beautiful species of the genus thus far discovered. It resembles *P. ctenophorina* Ried. (Formosa) and *P. speciosa* Edw. (Assam) in the coloration of its body but the wing-pattern is very distinct from that of any described species of the genus. Compared with a paratypical female of *ctenophorina* in the writer's collection, the present species is seen to have the tibial rings yellowish instead of snowy white and the red of the abdomen includes only segments two and three, in *ctenophorina* including tergites two to four and sternites two to five.

***Pselliophora harmandi* nov. sp.**

General coloration fulvous orange; femora obscure yellow, the tips scarcely darkened; tibiae dark brown, the bases broadly yellow; wings deep yellow; the tip and axil conspicuously dark brown; abdomen with the caudal margin of tergite two and the basal half sternite seven black, male hypopygium with the lateral lobes of the ninth tergite obtusely truncated; eighth sternite with a conspicuous median lobe.

Male. — Length, 17–17.5 mm.; wing, 16–16.5 mm.

Female. — Length, 21 mm.; wing, 18 mm.

Head entirely fulvous orange; terminal segment of palpus brown. Antennae orange, the flabellations of the male antennae beyond the first flagellar segment dark brownish black. The antennae of the female are entirely orange.

Thorax entirely dark fulvous orange. Halteres orange-brown. Legs with the coxae and trochanters fulvous orange; femora obscure yellow, the tip very slightly infuscated tibiae dark brown, the base broadly obscure yellow, on the hind legs this color including more than the basal third; tarsi dark brown. Wings deep yellow, the tip beyond the cord dark brown, this including the stigmal spot which occupies the outer end

of cell 1st R_1 and all of cell 2nd R_1 ; cells R_2 , R_3 , R_5 , M_1 , 2nd M_2 and M_3 are entirely dark; cell 1st M_2 is dark except the extreme base; the distal half of cell Cu_1 is also dark; in some specimens the yellow includes all of cell Cu_1 and the base of M_3 ; a paler brown cloud at the end of vein 1st A in cells Cu and 1st A ; wing-axil in cell 2nd A conspicuously dark brown; veins conforming in color to the membrane. Venation: Cell M_1 broadly sessile.

Abdomen fulvous orange; caudal margin of tergite two and the basal half of sternite seven conspicuously blackened; hypopygium obscure orange, the apices of the sclerites and the appendages darkened. Male hypopygium with the ninth tergite deeply emarginate, the lobes blackened, very short, their apices obtusely truncated, the mesal margin of these lobes glabrous and densely pitted, the lateral margins setiferous; median area of the emargination with a small, blunt, median lobe that is obscure orange. Eighth sternite bearing a conspicuous, foot-shaped median lobe that juts caudad, the apical and lateral margins densely set with erect black hairs, the median ventral area filled with a pale membrane.

In the female, the characters are as in the male except as follows: Cell M_1 narrowly sessile; base of ovipositor shiny black, the valves horn-colored.

Habitat — French Indo-China.

Holotype, ♂, Sébang-hien R. (Si-bang-hieng or Sé-bang-lian), Cambodia, 1878 (Harmand); collector's number 1211.

Allotopotype, ♀.

Paratopotype, ♂.

Type in the collection of the Paris National Museum.

This beautiful crane-fly is named in honor in honor of Dr. Harmand, the noted explorer.

***Pselliophora flavostigma* nov. sp.**

Female. — Length, 19 mm.; wing, 17 mm.

Closely related to *P. harmandi*, differing as follows:

Legs with the femoral tips narrowly but conspicuously blackened; tibiae black with a narrow, obscure whitish ring near the base, poorly defined on the inner surface; middle and fore legs broken. Wings yellow, the stigma yellow, this including cell 1st R_1 and the base of 2nd R_1 , the color deeper than that of the remainder of the wing-surface; anal angle of wing not at all darkened. No black bands on tergite two or sternite seven.

Habitat. — French Indo-China.

Holotype, ♀, Sébang-hien R. (Si-bang-hieng or Sé-bang-han), Cambodia, 1878 (Harmand); collector's number 1211.

Type in the collection of the Paris National Museum.

This species resembles a large and highly colored *P. compedita* (Wied.) but is more closely allied to *P. harmandi*

GENUS **Tipulodina** Enderlein.

Tipulodina micracantha nov. sp.

Male. — Length, 20 mm.; wing, 16 mm.

Related to *T. pedata* (Wied.) of Java, differing as follows :

Frontal prolongation of the head dark brown laterally. Antennae with the basal enlargements of the flagellar segments more conspicuous. Laterally praescutal stripe distinct; median praescutal stripe with a black capillary line that is indicated only at the extreme cephalic end. Femora pale brown, the apex broadly pale, the tips scarcely darkened as in *pedata*. Wings with a brown cloud in cell *M* as in the *pedata* group; this smaller than in *pedata*; cell *R*₅ clear, the brown apical clouding confined to cells *R*₂ and *R*₃; narrow but conspicuous brown seams along the cord, outer end of cell 1st *M*₂ and the veins issuing from cell 1st *M*₂. Venation : cell 1st *M*₂ very high, the basal deflection of *Cu*₁ at about one-third its length; cell *M*₁ very short; vein 2nd *A* comparatively short and straight. Abdominal tergites two to four pale yellowish brown with a narrow, subterminal brownish black ring, the extreme margin conspicuously pale; tergites five to seven similar but with a median brownish black longitudinal line, the pale caudal margins very conspicuous; tergite eight narrow, black; hypopygium pale; sternites yellowish white. Male hypopygium with the caudal margin of the tergite more heavily chitimized. Pleural hook comparatively very small, broadbased, the chitimized portion straight, the tip blunt and narrowly blackened; possibly with the extreme tip broken in the unique type. Eighth sternite projecting caudad as in *T. pedata*.

Habitat. — French IndoChina.

Holotype, ♂, Baria, Cochin-China, 1911 (Dr. Vauthier).

Type in the collection of the Paris National Museum.

Tipulodina scimitar nov. sp.

Male. — Length, 19 mm.; wing, 14 mm.

Related to *T. pedata* (Wied.) of Java, differing as follows :

Mesonotum light grey with three conspicuous dark brown stripes, the

median tripe narrowly divided by a still darker capillary vitta; postnotum conspicuously pruinose, heavily infuscated medially. Pleura light grey pruinose. Legs with a pale, subterminal femoral ring, the tips narrowly blackened; white tibial ring about twice the black tip. Wings with a brown cloud in cell *M* at in the *pedata* group; cell *R*₅ largely clear; cell 1st *M*₂ with the basal deflection of *Cu*₁ before midlength; cell *M*₁ shallow; vein 2nd *A* much shorter than in *pedata*. Basal abdominal tergite dark brown, grey laterally; remaining tergites uniformly yellowish brown, the subterminal segments feebly darkened; lateral margin of tergites broadly testaceous; caudal margins of tergites not pale; sternites whitish testaceous. Male hypopygium as in *T. pedata*. Ninth tergite with the caudal margin very narrow, not conspicuously chitinized. Pleural hook somewhat as in *pedata* but more slender, decussate just beyond midlength, the long, acute tips blackened and smooth; a conspicuous fringe of hair on mesal side at base, these hairs shorter and less abundant on the lateral face and farther distad, beyond the point of decussation, lacking or practically so.

Habitat. — Burma.

Holotype, ♂. Rangoon, 1902 (J. Claine).

Type in the collection of the Paris National Museum.

GENUS *Tipula* Linnæus.

Tipula hypopygialis nov. sp.

General coloration orange; head and terminal two segments of abdomen black; wings broad, dark brown; cell 1st *M*₂ comparatively small; male hypopygium large but simple in structure.

Male. — Length about 17–18 mm.; wing, 22–23 mm.

Middle leg, femur, 12 mm.; tibia, 11.6 mm, hind leg, femur, 12.3 mm.; tibia, 12.8 mm.

Head, including the frontal prolongation, mouthparts and palpi, black. Antennae with the first scapal segment black, the second segment orange; flagellum broken.

Prothorax and mesothorax entirely orange. Halteres black, the base of the stem narrowly orange. Legs with the coxae and trochanters orange; remainder of the legs brownish black; legs long and slender. Wings broad, uniformly suffused with dark brown, cell *Sc* and the stigma still darker brown; veins dark brown. Venation: *Sc*₂ ending before the fork of *Rs*, *Sc*₁ lacking; *Rs* more than twice *R*₂₊₃, arcuated at origin; *R*₂₊₃ a little longer than *R*₂ alone; distal section of *R*₂ preserved; deflection of *R*₄₊₅ very short; cell 1st *M*₂ small, pentagonal; petiole of cell *M*₁ mode-

rately long, about equal to or a little shorter than the 2nd section of M_{2+1} ; $m-Cu$ very conspicuous, near midlength of cell 1st M_2 .

Addomen orange, tergites eight and nine and the posterior margin of seven black; sternites eight and nine black. Male hypopygium large but of simple organization; ninth tergite transverse, terminating in a small, conical, median lobe. Pleurites slightly projecting, clothed with abundant very long, black setae; pleural appendages appearing as slender chititized arms, directed caudad and bearing spinner near their tips.

Habitat. — Southwest China.

Holotype, ♂, Province of Kouy-Tchéou (Kwei-chow), 1910 (Père Cavalerie).

Paratopotype, a fragmentary ♂.

Type in the collection of the Paris National Museum.

Tipula hypopygialis is related to *T. melanomera* Walk. (Nepal) from which it differs chiefly in the large size and dark brown wings.

***Tipula obliterated* nov. sp.**

General coloration velvety black; abdominal segments two to four orange, wings with a faint brown tinge, the stigma darker; terminal section of R_2 entirely atrophied.

Male. — Length, 9 mm., wing, 13.8 mm.

Rostrum, palpi, antennae and head velvety black.

Thorax velvety black, the mesonotal praescutum with indications of four faintly grayish stripes. Halteres dark brown, the extreme bases indistinctly pale. Legs brownish black. Wings with a faint brown tinge; stigma oval, darker brown; veins still darker brown. Venation: R_{2+3} weakly angulate near midlength; entire distal section of R_2 atrophied; petiole of cell M_1 approximately one-half the cell.

Abdomen with the first segment dark brown, the caudal margin of the tergite narrowly orange; segments two to four, the lateral margin of tergite five, and more than the basal half of sternite five fiery orange; remainder of abdomen velvety black. Male hypopygium of simple structure as in *melanomera* group. Ninth tergite transverse with a broad, shallow, median notch, in the base of which is a microscopic tooth; caudal margin of the tergite highly polished and glabrous, the remainder of the surface with conspicuous setiferous punctures.

Habitat. — East Thibet.

Holotype, ♂, Moupin, 1870 (Père David).

Type in the collection of the Paris National Museum.

Tipula obliterata belongs to the group of *T. melanomera* Walk. In its general appearance it closely resembles *T. holoserica* (Mats.) and *T. rufizona* Edw., but has the terminal section of R_2 atrophied as in *T. cinereifrons* Meij., an otherwise very different fly.